IN THE SPECIFICATION:

Please rewrite the two full paragraphs on page 5 as follows:

Japanese Patent Publication No. 6-85196 discloses a software vending machine solving such a problem. The software vending machine has a function of demonstrating the software of the user at the time of purchasing the software. Such a demonstration of the product to be purchased, however, does not allow the user to fully appreciate the true value of the product, except for only a few ~~softwares. Particularly such as books full appreciation of which generally take much time cannot be sufficiently evaluated by the user through such a method.~~software products. Similarly, since books generally require significant time to be fully appreciated, they also cannot be sufficiently evaluated by a user according to this method. This problem must be solved to spread the use of the electronic data distribution system.

(5) The conventional technique described above has a problem that what can be purchased is limited to data already in the electronic form. This seems to be a matter-of-fact constrict. Where it is known that wide variety of contents not in the electronic form are available through the traditional route as in the case of books, there would be only a small number of users who ~~are~~ would be eager to use such an electronic data distribution system that allows access to information of very limited contents. Therefore, a system allowing purchase of data which may or may not be in the electronic form, in ~~one same~~ a single manner is desired.

Please rewrite the first three complete paragraphs of Page 6 as follows:

(7) As already described, there is a method of determining whether a copy is allowed or not, based on a value of a copy flag included in the data, when there is an instruction ~~of~~ for copying the digital data. When the value of the copy flag is set to indicate "copy prohibited", the user suffers from a problem that it is impossible to copy the data for back up. A back up copy is legitimate and hence there must be some measure for the user's convenience.

Therefore, an object of the present invention is to provide a data distribution system capable of reducing time necessary for data transfer as much as possible, and a data distributing apparatus and a data reproducing apparatus therefor.

Another object of the present invention is to provide a data distribution system effectively preventing unauthorized ~~copy~~ copying in electronic data distribution.

Please rewrite the last paragraph of page 8 as follows:

As the data buffering apparatus is handled as one of the data sources, it becomes unnecessary to receive data from a distant data source. Further, as the transfer from the data buffering apparatus is far faster as compared with other transfer, the time necessary for the user to obtain the data item can be reduced. Preferably, the data buffered in the data buffering apparatus is selected in accordance with the ~~capacity~~ size of the data item, the time necessary for one transfer of data, the number of times the data has been selected, or in accordance with the combination of these. When the free area of the data buffering apparatus becomes small, the data is selected and erased in accordance with some standard. The data is preferably selected in accordance with the time necessary for one transfer, the ~~number of selection~~ size of the data selection, the time past after the data was selected last time, or an arbitrary combination of these.

Pl as rewrite the paragraph bridging pag s 9 and 10 thr ugh th paragraph bridging pages 10 and 11 as follows:

According to another aspect of the present invention, a copied data detecting system includes: a data reproducing apparatus to which an external storage medium is mounted, so that the data item recorded on the external storage medium is reproduced; and a data checking apparatus is connected by communication to the data reproducing apparatus for determining whether or not the external storage medium ~~that~~ is mounted on the data reproducing apparatus ~~and~~, reproduction ~~thereof~~ of the data is instructed, and the ~~records~~ data was copied without authorization or not. In the normal state of use, each external storage medium has a unique authentication data allotted and recorded thereon, and the authentication data is copied as it is to the external storage medium when copied without authorization. The data reproducing apparatus includes a reproducing apparatus to which an external storage medium can be attached, reproducing a data item recorded on the external storage medium in response to a reproduction instruction, a reproduction switch instructing reproduction of the data item to the reproducing apparatus, and means responsive to an operation of the reproduction switch for transmitting an authentication data recorded on the external storage medium to the data checking apparatus. The data checking apparatus includes a data management table managing the authentication data of the external storage medium which is being reproduced, by recording the authentication data transmitted from the data reproducing apparatus, and determining means for determining whether the external storage medium mounted to the data reproducing apparatus ~~contain~~ contains an unauthorized copy or not, by determining whether the authentication data transmitted from the data reproducing apparatus already exist in the data management table or not.

As it is possible to determine whether the external storage medium contains an unauthorized copy or not, a necessary action can be taken, discouraging unauthorized copying.

The copied data detecting system in accordance with another aspect of the present invention includes: a data reproducing apparatus to which an external storage medium is mounted so that a data item recorded on the external storage medium is reproduced, and a data checking apparatus that is connected by communication to the data reproducing apparatus ~~and determining~~ determines whether or not the external storage medium is mounted on the data reproducing apparatus and whether or not reproduction ~~thereof is instructed record data copied without authorization~~ of the stored data item is authorized. The data reproducing apparatus includes a reproducing apparatus to which an external storage medium can be attached, reproducing a data item recorded on the external storage medium in response to a reproduction instruction, a reproduction switch instructing reproduction of the data item to the reproducing apparatus, and transmitting means responsive to an operation of the reproduction switch for transmitting authentication data recorded on the external storage medium repeatedly to the data checking apparatus in accordance with a prescribed transmission pattern. The data checking apparatus includes a data management table managing the authentication data of the external storage medium which is being reproduced, by recording the authentication data transmitted from the data reproducing apparatus and the time of transmission, and determining means responsive to the authentication data transmitted from the data reproducing apparatus for determining, based on the record of the data management table and the time of transmission of the authentication data ~~of the present time~~, whether the external storage medium which mounted on the data reproducing apparatus contains an unauthorized copy or not.

Please rewrite the first three full paragraphs of page 19 as follows:

Referring to Fig. 2, the data information table 128 held by data vending machine 102 includes: a data number field 140 representing the number of selectable data; a name field 142 storing names of selectable data; a price field 144 storing price data representing sales price of each data; a data source field 146 representing data source where each data exists; and a ~~capacity~~ size field 148 representing, in bytes, ~~capacity~~ the size of each data. The number of data names stored in the name field 142 is the same as the number stored in the data number field 140.

The data number field 140 represents the number of selectable data by a 2-byte unsigned integer. In the example shown in Fig. 2, the number of selectable data items is 3.

Here, it is assumed that 36 characters of ASCII code ~~is~~ are used for storing one piece of data in the name field 142. When the length of the data name exceeds 32 characters, only the first 32 characters are stored. If the length of the data name is shorter than 32 characters, 0 is filled in the remaining areas. Though ASCII code is used as the character code in the example shown in Fig. 2, 2-byte character code such as the shift JIS code generally used in Japan, or 3-byte code such as UNICODE may be used.

Please rewrite the first full paragraph of page 20 as follows:

The ~~capacitance~~ size field 148 includes a 4-byte unsigned integer representing, in bytes, the ~~capacity~~ size of each data.

Please rewrite the second two full paragraphs of page 22 as follows:

Thereafter, whether the previous item switch 172 shown in Fig. 4 is pressed or not is determined (184). When the previous item switch 172 is pressed, the selection target data is switched to the data immediately above (or immediately left ~~to~~ of) the data which is the present target (186).

Thereafter, whether the next item switch 174 shown in Fig. 4 is pressed or not is determined (188). When the next item switch 174 is pressed, the selection target data is switched to the data immediately below (or immediately right ~~to~~ of) the present target data (190).

Please rewrite the paragraph bridging pages 23 and 24 as follows:

In such a situation where the transmission is one directional while the data rate is extremely high, all the data are broadcast in a prescribed time period (222) as shown in Fig. 7, and the same data are broadcast in the next cycle (224), and such processings are repeated. If it is known that the desired data will be ~~transmit~~ transmitted without fail after a prescribed time period as in this example, the received data up to the reception of the desired data may be discarded, and only the necessary data can be received and processed. Such a method is practical especially for a data source such as a data satellite, of which transmission is at very high speed while transmission of selected data to individual destination is difficult.

Please rewrite the last full paragraph on Page 25 as follows:

As described above, in the apparatus of the present embodiment, it is possible to receive data designated by the user from a data source from which the data can be obtained at the highest speed, as the data information table and the data rate table are referred to. Therefore, even when the data ~~capacity~~ size is large, wait time of the user can be made short, and hence practical distribution of electronic data is possible.

Please rewrite the paragraph bridging Pages 28 and 29 and the first two full paragraphs of Page 29 as follows:

Fig. 12 shows the manner of storage of the data in buffer memory 254 shown in Fig. 9. As can be seen from Fig. 12, buffer memory 254 stores in order, the data ~~capacity~~ size and the data body continuously, for each data. Further, buffer memory 254 stores data by repeating the ~~above-described~~ above-described configuration by the number of necessary data. For example, buffer memory 254 stores, after the data ~~capacity~~ size 270 of the first data, the data body 272 of the said data, as shown in Fig. 12. Immediately thereafter, data ~~capacity~~ size 270 of the second data is stored, immediately followed by the data body 272 of the second data. In the similar manner, the data ~~capacity~~ size 270 and the data body 272 of the third data are stored, and the manner is the same thereafter.

Each data ~~capacity~~ size 270 represents the number of bytes of the data body 272, by a 4-byte unsigned integer. No space is formed between different data. At this time, the amount of use U of buffer memory 254 is calculated in accordance with the following equation.

U = 4 * data number + sum of ~~capacity~~ size of each data body

The data number and the ~~capacity~~ size of each data body can be readily obtained from the data number field 140 and the ~~capacity~~ size field 148 of data information table 240, and therefore the amount of use U of buffer memory 254 can be readily calculated.

Please rewrite the paragraph bridging Pages 31 and 32 as follows:

The replacement target data is obtained by making reference to the selection number field 262 and data source field 260 of data information table 240 as described above. Therefore, the information of the number of replacement target data and the ~~capacity~~ size of each replacement target data necessary for calculating the capacity T of the replacement target data can be obtained from the contents of data source field 260, the ~~capacity~~ size field 148 and the selection number field 262 of data information table 240. The capacity T of replacement target data T represents the capacity occupied in buffer memory 254 by the data which can be replaced by the data of interest. Therefore, it is confirmed whether capacitance T < D holds or not (296), and the following operation is performed selectively dependent on the result of determination.

Please rewrite from the third full paragraph on Page 33 through the first full paragraph on Page 34 as follows:

Various other methods may be employed, including a method in which data having large ~~capacity~~ size is stored with priority in buffer memory 254, the method in which data requiring long time for one transmission is stored with priority in buffer memory 254 considering data rate as well, a method in which a product of the data ~~capacitance~~ size and the number of selection of the data is large is stored with priority in buffer memory 254, or the data of which time of last selection is least recent is deleted from buffer memory 254 with priority, for example. These methods can be implemented by using data information table 240 and data rate table 244 of which examples are shown in Figs. 10 and 11.

Further, there may be various references for selecting the data to be deleted when the free area of buffer memory 254 becomes smaller. For example, a method in which data having the smallest data ~~capacity~~ size is deleted first, a method in which the data requiring shortest time for one transmission is deleted first, a method in which the data of which number of selection is the smallest is deleted first, or the method in which the data of which time of last selection is the least recent is deleted first may be employed by itself or in combination.

For example, a method is possible in which data that requires long time for transmission from a data source other than the buffer memory to the data receiving apparatus is stored with priority in buffer memory 254. This method can be implemented in the following manner. First, from the ~~capacity~~ size field 148 of data information table 240 shown in Fig. 10, ~~capacities~~ sizes of respective data are retrieved. From data source field 260, data sources in which respective data exist are specified. Thereafter, from data rate table 244 shown in Fig. 11, data rates of respective data sources are retrieved. Thereafter, ~~capacities~~ sizes of respective data are divided by the data rates of the data sources in which respective data exist, and the quotients are compared with each other. The data having the smallest quotient is deleted with priority from buffer memory 254. The reason for this is that the data requires shorter time as compared with other data, for receiving from the data source again.

Please rewrite the first full paragraph of page 38 as follows:

There may be cases, however, where the difference in communication time between each of the data sources is ~~innegligible~~ not negligible. In such a case, the data source may be selected in the following manner. First, data source selecting apparatus 346 obtains the next time at which the transmission of the desired data starts, for each data source, from data schedule table 342. The data source selecting apparatus 346 adds the communication time of each data source to the transmission start time of each data source, and selects the data source having the earliest start time by comparing the results. In this case, substantially, the data source selecting apparatus 346 compares the time of termination of transmission from each data source, or the time at which reception is completed at the data receiving apparatus 348.

Please rewrite the third full paragraph of Page 40 as follows:

In Fig. 18, all numerical values are represented in decimal notation. Each numerical value corresponds, as an example, to the third block of the first data of two data in the data information table 128 shown in Fig. 7. More specifically, in the example shown in Fig. 18, data No. field 400 of data block 390 stores "1", because, in the example shown in Fig. 17, the data is the first data. Block No. field 402 stores "3" representing the number of this block. Block number field 404 stores "4". The reason for this is that, according to the data information table 128 of Fig. 17, the ~~capacity~~ size of the first data is 14636 bytes (see ~~capacity~~ size field 148), and the length of 1 block is 4096 bytes, and hence the first data is divided into four data blocks. Data length field 406 stores 4096, as the block 390 is not the last block.

Please rewrite the paragraph bridging pages 43 and 44 as follows:

Data receiving apparatus 382 connects individual data blocks transmitted in this manner to complete one data. Thereafter, the operation of data distribution system 360 until the data is newly selected by data selecting apparatus 122 is the same as that described in the first embodiment, and therefore, details thereof will not be repeated here. The number of blocks into which each data is to be divided can be determined from the information of ~~capacity~~ size field 148 (see Fig. 17) in the copy 374 of the data information table, and from the data length field 424 of data schedule management table 376, and the determination is made by data server 372.